# Distribution Integrity Management Subpart P for Small Operators

Bryan Kichler

PHMSA Training and Qualifications

Bryan.kichler@dot.gov

Excavation Damage means any impact that results in the need to repair or replace an underground facility due to a weakening, or the partial or complete destruction, of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection or the housing for the line device or facility.

Hazardous Leak means a leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

Integrity Management Plan or IM Plan means a written explanation of the mechanisms or procedures the operator will use to implement its integrity management program and to ensure compliance with this subpart.

Integrity Management
Program or IM Program

means an overall approach by an operator to ensure the integrity of its gas distribution system.



Mechanical fitting means a mechanical device used to connect sections of pipe. The term "Mechanical fitting" applies only to:

- (1) Stab Type fittings;
- (2) Nut Follower Type fittings;
- (3) Bolted Type fittings; or
- (4) Other Compression Type fittings.

#### **Small LPG Operator**

means an operator of a liquefied petroleum gas (LPG) distribution pipeline that serves fewer than 100 customers from a single source.



# §192.1003 What do the regulations in this subpart cover?

General. This subpart prescribes minimum requirements for an IM program for any gas distribution pipeline covered under this part, including liquefied petroleum gas systems. A gas distribution operator, other than a master meter operator or a small LPG operator, must follow the requirements in Sec. §192.1005- 192.1013 of this subpart. A master meter operator or small LPG operator of a gas distribution pipeline must follow the requirements in §192.1015 of this subpart.

## §192.1015

§192.1015 What must a master meter or small liquefied petroleum gas (LPG) operator do to implement this subpart?



### §192.1015

 (a) General. No later than August 2, 2011 the operator of a master meter system or a small LPG operator must develop and implement an IM program that includes a written IM plan as specified in paragraph (b) of this section. The IM program for these pipelines should reflect the relative simplicity of these types of pipelines.

## §192.1015

(b) Elements. A written integrity management plan must address, at a minimum, the following elements:

(1) **Knowledge.** The operator must demonstrate knowledge of its pipeline, which, to the extent known, should include the approximate location and material of its pipeline. The operator must identify additional information needed and provide a plan for gaining knowledge over time through normal activities conducted on the pipeline

Knowledge from or a way or attaining it from



- Design
- Construction
- Operations
- Maintenance activities
- Projects
- Repairs

#### KNOWLEDGE - "REASONABLY AVAILABLE"

Develop understanding of system from reasonably available information

- FAQ C.4.a.5 & C.4.a.1
- Does not require excavation
- Relevant to the current condition of the pipe or have a significant impact on its integrity

Location – main office, field office, field notes, operations logs, off-site

#### Knowledge - "Reasonably Available"

- Identify additional information that is needed to fill data gaps due to missing, inaccurate, or incomplete records
- Develop plan to collect data



(2) Identify threats. The operator must consider, at minimum, the following categories of threats (existing and potential): Corrosion, natural forces, excavation damage, other outside force damage, material or weld failure, equipment failure, and incorrect operation.

# Gas Distribution Threat Categories from GPTC G-192-8

- External Corrosion
  - Bare Steel Pipe (CP or no CP)
  - cast iron pipe (graphitization)
  - coated and wrapped steel pipe (CP or no CP)
  - Other metallic materials
- Internal corrosion
- Natural Forces
  - Outside force/weather: steel pipe
  - Outside force/weather: plastic pipe
  - Outside force/weather: cast iron pipe

- Excavation Damage
  - Operator (or its contractor)
  - Third-party
- Other Outside Force Damage
  - Vehicular
  - Vandalism
  - Fire/Explosion (primary)
  - Leakage (previous damage)
  - Blasting
  - Mechanical damage: Steel pipe, Plastic pipe, Pipe components

- (3) Rank risks. The operator must evaluate the risks to its pipeline and estimate the relative importance of each identified threat.
- Third Party Damage
- Corrosion
- Materials
- Earth Quakes

(4) Identify and implement measures to mitigate risks. The operator must determine and implement measures designed to reduce the risks from failure of its pipeline.



(5) Measure performance, monitor results, and evaluate effectiveness. The operator must monitor, as a performance measure, the number of leaks eliminated or repaired on its pipeline and their causes.



(6) Periodic evaluation and improvement. The operator must determine the appropriate period for conducting IM program evaluations based on the complexity of its pipeline and changes in factors affecting the risk of failure.

An operator must re-evaluate its entire program at least every five years. The operator must consider the results of the performance

# §192.1015(c) Records. The operator must maintain, for a period of at least 10 years, the following records:



(1) A written IM plan in accordance with this section, including superseded IM plans;



(2) Documents supporting threat identification; and

(3) Documents showing the location and material of all piping and appurtenances that are installed after the effective date of the operator's IM program and, to the extent known, the location and material of all pipe and appurtenances that were existing on the effective date of the operator's program.

#### More Information

Primis.phmsa.dot.gov

- DIMP Enforcement Guidance
- DIMP Inspection Forms

Other Sources:

- GPTC
- APGA
- SHRIMP

# Any Questions??



#### The End! Thanks!

